Sensors and Electronics Technology Branch (RIS)

Conducts research and development in sensing concepts, sensor technology, high temperature electronics and related areas such as materials and materials processing techniques. Emphasis is on developing advanced capabilities for measurement and control of aerospace propulsion systems, particularly for harsh environments and safety applications. Specific areas of work include microfabricated thin film sensors for temperature, strain, heat flux and flow measurements; remote sensors for temperature; chemical species sensors for leak detection, and emission and safety monitoring; silicon carbide (SiC) based electronic devices and sensors, microelectromechanical systems (MEMS), and nanotechnology. The Branch is equipped to fabricate sensors and electronic devices in micro/nano scales. Facilities include crystal growth facilities, cleanrooms for device fabrication, and facilities for test and evaluation of the sensors and devices.